

#ENVIRONMENT

Buckle Up!

Prepare for temperatures reaching 'uncharted territory,' the World Meteorological Organization warns.



The next five years are almost guaranteed to be sweltering, the World Meteorological Organization (WMO) warned today. Climate change has already raised baseline temperatures for the planet. Now, a weather pattern known as El Niño is going to make things even hotter when it develops later this year. That one-two punch from El Niño and climate change is expected to "push global temperatures into uncharted territory," WMO Secretary-General Petteri Taalas said. "This will have far-reaching repercussions for health, food security, water management and the environment. We need to be prepared."

There's a 98 percent chance that one of the following five years will be the warmest on record, according to a WMO report released today. There's also a 98 percent likelihood that the average temperature for the entire five-year period will be hotter than the previous five years.

The planet is already running a fever. The last eight years have been the eight



hottest on the books, the WMO reported in January. In the past few years alone, we've witnessed the jaw-dropping damage that extreme temperatures can bring.

The most extreme summer heatwave ever recorded in North America buckled roads and triggered a spike in emergency department visits in the Pacific Northwest US in 2021. China suffered its most severe heatwave on record last year. It was so widespread and long-lasting - stretching out more than 70 days - that it was likely also the most severe heat spell ever documented in the world, according to weather historian Maximiliano Herrera. Another record-smashing heatwave in July of last year sent temperatures in the notoriously cool and cloudy UK soaring above 40 degrees Celsius for the first time - an event researchers found to be "virtually impossible" without climate change.

All of that went down despite the mitigating effects of a rare and unusually long-

lasting "triple-dip" La Niña from September 2020 until the March of this year. Think of it as the opposite of El Niño; La Niña is a weather pattern that has a cooling effect on the planet.

Right now, with neither La Niña nor El Niño taking place, trade winds over the Pacific Ocean help push warm waters westward from South America toward Asia. As that happens, cooler water rises from deep in the ocean toward the surface. Those trade winds weaken with El Niño, allowing warm water to flow back east. The warmer water also pushes the Pacific jet stream, a fast-flowing air current, southward - which can influence the weather.

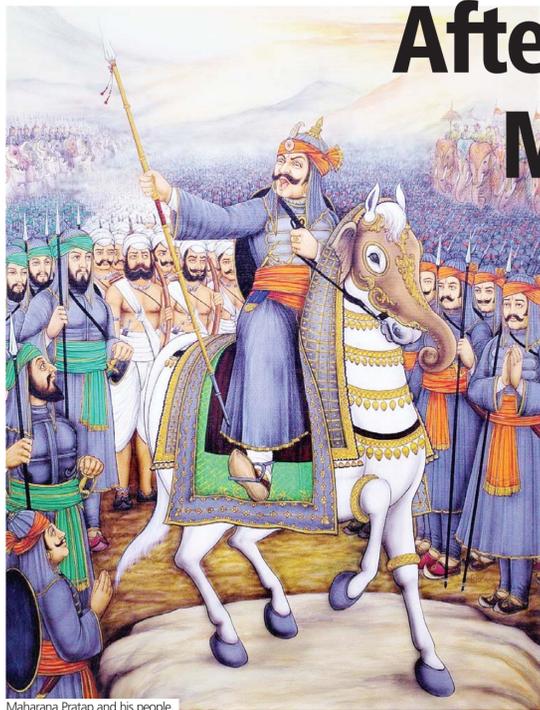
El Niño is expected to take shape sometime between May and July and last at least until the winter, according to the National Weather Service Climate Prediction Centre. It can take up to a year before El Niño starts to affect global temperatures, the WMO says, which could be 2024 in this case.

With El Niño likely to push the mercury up even higher than we've seen during the persistent La Niña event over the past few years, global temperatures could breach a worrying benchmark. There's now a 66 percent chance that during at least one year between 2023 and 2027, the annual average global temperature will rise more than 1.5 degrees Celsius higher than the preindustrial era (aka before burning fossil fuels created enough greenhouse gas pollution to heat the planet).

To be clear, 1.5 degrees of warming is a big deal. The Paris climate agreement strives to keep the world from warming beyond that threshold. So far, the planet has warmed by around 1.1 degrees Celsius above preindustrial levels - which is the main driver of the more extreme weather we're already seeing today. There's still a slim window of time to achieve that goal since the WMO predicts that the world will only temporarily overshoot the 1.5-degree target over the next five years.

"This report does not mean that we will permanently exceed the 1.5°C level specified in the Paris agreement, which refers to long-term warming over many years. However, WMO is sounding the alarm that we will breach the 1.5°C level on a temporary basis with increasing frequency," Taalas said in the press release.

Not that long ago, in 2015, the chance of the world experiencing warming above 1.5 degrees Celsius was near zero. But we're living in a different world today - and without swift action to tackle climate change, it's going to keep throwing us a lot more curveballs.



Maharana Pratap and his people.



Dr. Rima Hooja
An archaeologist, historian, writer & a distinguished academician

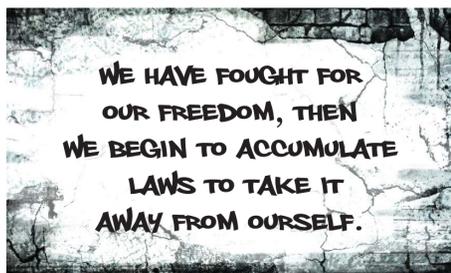
#VALOUR

he came upon his brother besides the fallen Chetak, he was filled with remorse at the thought that while the noble steed had given his life for his master, he himself had wasted so much time in opposing and hounding his own brother, Pratap, and supporting his enemies. Shakti begged forgiveness and after an emotional reunion, offered his own horse, in place of the dead Chetak, to Maharana Pratap so that he could continue to fight and lead Mewar. Shakti himself took guard to deal summarily with the enemy that followed. Many historians, among them Drs. G.H. Ojha, G.N. Sharma and Raghubir Singh Sitamau, however, have come to the opinion that this stirring story of the meeting between the two brothers, Pratap and Shakti Singh, after the fight at Haldighati is a legend without historical backing, which originated with the penning of the late 17th



Ruined Palace of Maharana Pratap at Chavand.

THE WALL



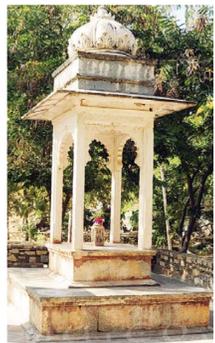
After Scorch Earth, Rejuvenating Mewar was no Mean Task! (...3)

Mewar citizens who had migrated southwards, or even out of Mewar, during the turbulent years of Mewar-Mughal confrontation began to drift back to their lands where possible. Agricultural activity picked up as the Mewar State policy now turned to encouraging agriculture in lands under the Maharana. This was assisted by a series of good monsoon years. Attention was given to good quality seeds, fertilizers, propagation of grafted shrubs, and planting trees along the sides of crop fields. Routes to Malwa and Gujarat were re-opened, which helped in the revival of trade and economic activities.

Chakrapani's work was used for finding water, constructing water bodies, giving horticultural inputs and for tree plantations around Avargarh, near Jhadol as early as 1577, even as the Maharana was hard-pressed for shelter, shade and plantations.

Pratap also made use of the old mining works, protected by a network of minor fortresses at Zawar for one of his temporary bases. Mewar is famed for its rich deposits of copper and iron ore, besides the zinc, lead and silver around the Zawar area, that were a source of revenue for Pratap's ancestor Rana Lakha and subsequent successors. The old workings and mine shafts around Zawar are believed to have been one of the places used for refuge, storage of a partial treasury, and for collecting arms by Maharana Pratap and his entourage. It appears that it was also a place used to strike coins.

The battle fought at Dewair in 1582 marked a turning point in the history of Pratap's fight against the Mughals. Several Mughal garrison outposts were overrun, and the tract stretching from Dewair to



The place where Amar Singh Dispersed his Ashes.

played his part too, leading troops and taking on administrative duties. However, Pratap was never able to recover his ancestral capital, Chittor, even though he managed to restore Mewar's control over some of the area around Chittor. Mandalgarh too remained under Mughal authority. Gradually, some Mewar citizens who had migrated southwards, or even out of Mewar, during the turbulent years of Mewar-Mughal confrontation began to drift back to their lands where possible. Agricultural activity picked up as the Mewar State policy now turned to encouraging agriculture in lands under the Maharana. This was assisted by a series of good monsoon years. Attention was given to good quality seeds, fertilizers, propagation of grafted shrubs, and planting trees along the sides of crop fields. Routes to Malwa and Gujarat were re-opened, which helped in the revival of trade and economic activities.

Practical Manual For Agriculture

Cotton plantations were encouraged, and an entire township, called Kapsan (from the word kapas, meaning cotton), was established by Maharana Pratap, as known from a copper land-grant found at Godiyana. Instructions in Chakrapani Mishra and his 'Vishva-Vallabha' text were apparently closely followed to care for trees struck by lightning, and foster better orchards. The growing of vegetables oil-seeds such as sesame and mustard, lentils, flowers, and mangoes with altered



Chetak dies of wounds.

small pits, was also encouraged. Significantly, agriculture related state initiatives during the latter part of Pratap's reign seem directly related to the advice provided in the 'Vishva-Vallabha'. The policies continued to be implemented during the reign of Pratap's son, Maharana Amar Singh too. In addition, it would appear that the 'Vishva-Vallabha' remained an important practical manual for agriculture under successive Mewar rulers well into the 18th century.

The 'Vishva-Vallabha' was written at a critical time in the history of Mewar. Commissioned just before Haldighati, it suggests that Maharana Pratap was conscious of the crucial issue of agriculture in the immediate as well as long-term future of Mewar, and for a suitable state policy that would provide both, re-settlement spaces for displaced rural agrarian communities, and new settlements in mainly hilly, forested lands with populations of Bhils, Gossains etc., that were less based on settled agricultural practices. These policies encouraged resettlement of people in other areas, enabled new orchards and farming spaces, and kindled hope during a prolonged period of problems resulting from turning the fertile river-fed plains areas of Mewar into 'scorched earth'. The role of Chakrapani Mishra and his 'Vishva-Vallabha' in the re-vitalization and invigoration of Mewar's fields, forests and farmlands at this critical time is worthy of recognition.

Concluded
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Maharana's horse- Chetak's Smarak.

and his Mewar, and even Emperor Akbar found himself constrained to come into Mewar to search for his elusive enemy. Between 1576 and 1585, Pratap foiled numerous expeditions sent under experienced Mughal commanders as recounted in texts like Rana-Raso, Amarsar, etc. Full use was made of the natural terrain of Mewar, and the Mughal supply lines and traffic along the traditional Mewar-Malwa, Mewar-Gujarat, and Ajmer-Gujarat routes was disrupted on many occasions. Over time, various forts, settlements, villages and townships became associated with the Maharana's rapid movements and temporary headquarters among them - Kumbhalgarh, Gogunda, Ubeshwar, Dholya, Machin, Zawar, Dholan, and eventually Chavand, to name a few.

Towards New Capital

In March 1581, Shahbaz Khan had over-confidentially reported to Akbar that Mewar's power had been permanently crushed. It was an over-optimistic statement, however, as Maharana Pratap continued his guerrilla warfare resistance, breaking up Mughal lines of communication, and continuing to have a well-entrenched and effective espionage system covering the Mughal troops, as well as a scorched earth policy till 1582.

Traditional accounts underline that during this period the land was not ploughed and fell fallow by the Mewaris from before Haldighati to after the battle of Dewair in 1582. Willful disobedience in carrying out agriculture production where forbidden by the Maharana's order carried the death penalty. Significantly, however,

Between 1585 and his death in January 1597, the Maharana succeeded in recovering the Chappan area, Vagar, and other substantive parts of Mewar. Prince Amar Singh played his part too, leading troops and taking on administrative duties. However, Pratap was never able to recover his ancestral capital, Chittor.

By Rick Kirkman & Jerry Scott

BABY BLUES



ZITS



By Jerry Scott & Jim Borgman

#TRIED&TASTED

Refreshing Summer Drinks for Children

These drinks are perfect for quenching your thirst this summer.

Kids should stay hydrated during the summer when the sun is blazing in the sky and temperature is soaring up. Fluid intake is essential for both outdoor and indoor activities. During hot summer days, children should avoid artificially flavoured drinks in favour of healthy summer drinks.



Cherry Limeade

Ingredients
2 oz of frozen cherries (thawed)
A cup of fresh lime juice
A cup of sugar (granulated)
4 cups of water

Preparation
1. Puree cherries and

the lime juice into a fine mixture.
2. Low boil the cherry-lime mixture with a cup of water and sugar in a medium saucepan. Stir constantly.
3. Strain it and refrigerate. Add three more cups of water and serve it over ice.



Refreshing Lime Water

Ingredients
A cup of freshly squeezed lime juice (Approximately 5 limes)
10 cups of water
Ice
Fresh sprigs of mint
Lime slices

Preparation
1. Squeeze the juice from the limes and remove the seeds. Mix with ice water.
2. Garnish the drink with lime slices and sprigs of mint constantly.
3. You can also make lime ice cubes by freezing the juice in ice cube trays.
4. You can pop the frozen cube in a glass of water.



Tropical Party Punch

Ingredients
2 litres of mango nectar
4 tablespoons of sweetened lime juice
9 oz can of pineapple juice
1 1/2 cups of cream of coconut
3 tablespoons of grenadine
A litre of seltzer water
Ice
Maraschino cherries

Preparation
1. Mix the mango nectar, lime juice, pineapple juice, and coconut cream in a large pitcher until they are combined very well. This is the base of the punch.
2. Store this in the fridge until they are ready to serve.
3. Fill the glass with ice and fill 2/3 of the glass with the base. You can top it off with seltzer water and grenadine.



Pink Lemonade Punch

Ingredients
A can of frozen pink lemonade concentrate
5 cups of white cranberry juice cocktail
5 cups of lemon-lime soda (chilled)
Fresh mints sprigs

Preparation
1. Stir the pink

lemonade concentrate and cranberry juice cocktail together in a large pitcher.
2. Cover the pitcher and chill.
3. When you are ready to serve, stir it in lemon-lime soda.
4. Garnish this drink with fresh mint.



Agua Fresca

Ingredients
2 cups of cold pineapple chunks
2 cups of cold strawberries, hulled
8 cups of water
1/4 cup of sugar blend

Preparation
1. Put all the ingredients in a blender
2. Well blend all the ingredients.
3. Pour it directly into the glasses or sieve it to remove the foam.